U.S. Application No.: 09/871,059
AMENDMENT D

Attorney Docket: 3968.024

## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

## Listing of Claims

1-28 (canceled)

- 29. (previously presented) A two-component cheese flavoring comprising separate premix A and premix B:
  - premix A) volatile component contents comprising
- i) from 5 to 200 parts by weight of compounds having
   acidic and acetic-acid-like flavors (Group 1);
- ii) from 0.1 to 10.0 parts by weight of compounds having milk-like and creamy flavors or cream-like or caramel-like flavors (Group 2);
- iii) from 0.03 to 6.0 parts by weight of compounds
  having fruity and flowery flavors (Group 3);
- iv) from 0.01 to 15.0 parts by weight of compounds
  having strong flavors, blue mold flavors and rind flavors (Group
  4);
- v) from 0.003 to 15.0 parts by weight of compounds having fatty flavors (Group 5);
- vi) from 0 to 0.05 parts by weight of compounds having
  animal flavors (Group 6);
- vii) from 0.0003 to 0.6 parts by weight of compounds having roasted flavors and cocoa-like flavors and also smoky flavors (Group 7);

Attorney Docket: 3968.024

- viii) from 0.00005 to 0.1 parts by weight of compounds having vegetable-like flavors (Group 8);
- ix) from 0 to 0.1 parts by weight of compounds having mushroom-like flavors or soft-cheese-like flavors (Group 9);
  - premix B) non-volatile component contents comprising:
- i) from 100 to 480 parts by weight of compounds having the taste impression salty (Group 10);
- ii) from 50 to 550 parts by weight of compounds having the taste impression sour (Group 11);
- iii) from 5 to 200 parts by weight of compounds having astringent, bitter notes (Group 12);
- iv) from 0 to 100 parts by weight of compounds having the taste impression sweet (Group 13); and
- v) from 0 to 140 parts by weight of compounds having a glutamate-like taste impression (umami) (Group 14).
- 30. (previously presented) A two-component cheese flavoring as in Claim 29, wherein said cheese flavoring is Parmesan.
- 31. (previously presented) A two-component cheese flavoring as in Claim 29, wherein said cheese flavoring is cheddar.
- 32. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having acidic and acetic-acid-like flavors (Group 1) is selected from the group consisting of carboxylic acids having from 2 to 16 carbon atoms.
- 33. (previously presented) A cheese flavoring according to Claim 32, wherein said carboxylic acids having from 2 to 16 carbon atoms are selected from the group consisting of acetic acid, propionic

AMENDMENT D

Attorney Docket: 3968.024

acid, butyric acid, valeric acid, caprylic acid, caproic acid, capric acid, lauric acid and myristic acid.

- 34. (currently amended) A cheese flavoring according to Claim 29, wherein said compounds having milk-like and creamy flavors or cream-like or caramel-like flavors (Group 2) are selected from the group consisting of saturated and unsaturated [[5]]  $\underline{\delta}$  and [[y]]  $\underline{\gamma}$  -lactone having 6 to 14 carbon atoms, hydroxy ketones and diketones having 4 to 8 carbon atoms and aromatic aldehydes.
- 35. (currently amended) A cheese flavoring according to Claim 34, wherein said saturated and unsaturated [[5]]  $\underline{\delta}$  and [[y]]  $\underline{\gamma}$  lactone having 6 to 14 carbon atoms are selected from the group consisting of jasmine lactone, [[5]]  $\underline{\delta}$  -decalactone, [[8]]  $\underline{\delta}$  octalactone, [[5]]  $\underline{\delta}$  -undecalactone, [[5]]  $\underline{\delta}$  -dodecalactone and [[5]]  $\underline{\delta}$  -tetradecalactone and [[y]]  $\underline{\gamma}$  -caprolactone, [[y]]  $\underline{\gamma}$  heptalactone, [[y]]  $\underline{\gamma}$  -octalactone, [[y]]  $\underline{\gamma}$  -decalactone and [[y]]  $\underline{\gamma}$  -dodecalactone.
- 36. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having fruity and flowery flavors (Group 3) are selected from the group consisting of ethyl, propyi and butyl esters of unbranched and branched carboxylic acids having 2 to 12 carbon atoms, saturated, unsaturated, unbranched and branched alcohols and aldehydes.
- 37. (previously presented) A cheese flavoring according to Claim 36, wherein said ethyl, propyi and butyl esters of unbranched and branched carboxylic acids having 2 to 12 carbon atoms are selected from the group consisting of ethyl propionate, ethyl butyrate,

AMENDMENT D

Attorney Docket: 3968.024

ethyl caprylate, ethyl caprate, ethyl caproate, ethyl isobutyrate, ethyl isovalerate and also propyi caprylate and butyl acetate.

- 38. (currently amended) A cheese flavoring according to Claim 36, wherein said saturated, unsaturated, unbranched and branched alcohols is selected from the group consisting of 2-pentanol, isoarnyl alcohol, hexanol, methyl 2-methylbutyrate, 3-methyl-2-butenol and 2-phenylethyl alcohol.
- 39. (previously presented) A cheese flavoring according to Claim 36, wherein said aldehyde is selected from the group consisting of benzaldehyde, phenylacetaldehyde and (E)-2-phenylbutenal.
- 40. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having strong flavors, blue mold flavors and rind flavors (Group 4) are 2-alkanones and 2-alkanols having 5 to 12 carbon atoms.
- 41. (previously presented) A cheese flavoring according to Claim 40, wherein said 2-alkanones are selected from the group consisting of 2-pentanone, 2-heptanone, 2-octanone, 2-decanone and 2-nonanone.
- 42. (previously presented) A cheese flavoring according to Claim 40, wherein said 2-alkanols are selected from the group consisting of 2-heptanol and 2-nonanol.
- 43. (previously presented) A cheese flavoring according to Claim
- 29, wherein said compounds having fatty and creamy flavors (Group
- 5) are unbranched aliphatic aldehydes and alcohols having from 7

AMENDMENT D

Attorney Docket: 3968.024

to 14 carbon atoms, unsaturated aldehydes having 8 to 15 carbon atoms and 2-alkanones having 6 to 16 carbon atoms and esters of long-chain unbranched fatty acids.

- 44. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having animal flavors (Group 6) are selected from the group consisting of nitrogen compounds, sulfur compounds, and branched fatty acids.
- 45. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having roasted flavors and cocoa-like flavors and also smoky flavors (Group 7) are selected from the group consisting of pyrazines which are monosubstituted or polysubstituted (monosubstituted to trisubstituted) with lower alkyi groups, branched aldehydes having 4 and 5 carbon atoms, phenols and alkylfurans.
- 46. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having vegetable-like flavors (Group 8) are selected from the group consisting of lower-alkyl-substituted thio compounds (1 to 4 carbon atoms), thiols and thioaldehydes.
- 47. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having mushroom-like flavors or soft-cheese-like flavors (Group 9) are selected from the group consisting of saturated and unsaturated alcohols and ketones having 8 carbon atoms.
- 48. (previously presented) A cheese flavoring according to Claim
- 29, wherein said compounds having the taste impression salty

AMENDMENT D

Attorney Docket: 3968.024

(Group 10) are salts having cations selected from the group consisting of sodium, ammonium, potassium, magnesium and calcium and anions such as chloride, hydrogen phosphate, dihydrogen phosphate, acetate and sulfate.

- 49. (previously presented) A cheese flavoring according to Claim
- 29, wherein said compounds having the taste impression sour (Group
- 11) are inorganic hydroxides.

and L-amino acids.

- 50. (previously presented) A cheese flavoring according to Claim
- 29, wherein said compounds having astringent, bitter notes (Group
- 12) are selected from the group consisting of L-amino acids, peptides and unsaturated fatty acids having 16 to 22 carbon atoms.
- 51. (previously presented) A cheese flavoring according to Claim 29, wherein said compounds having the taste impression sweet (Group 13) are selected from the group consisting of carbohydrates
- 52. (previously presented) A cheese flavoring according to Claim
- 29, wherein said compounds having a glutamate-like taste impression (Group 14) are selected from the group consisting of Lamino acids and peptides based on amino acids.
- 53. (previously presented) A method for producing an artificial cheese flavoring, comprising:
- (a) testing a sample cheese for the following volatile flavor components:

compounds having acidic and acetic-acid-like flavors (Group 1);

Attorney Docket: 3968.024

compounds having milk-like and creamy flavors or cream-like or caramel-like flavors (Group 2);

compounds having fruity and flowery flavors (Group 3);

compounds having strong flavors, blue mold flavors and rind flavors (Group 4);

compounds having fatty flavors (Group 5);

compounds having animal flavors (Group 6);

compounds having roasted flavors and cocoa-like flavors and also smoky flavors (Group 7);

compounds having vegetable-like flavors (Group 8);

compounds having mushroom-like flavors or soft-cheese-like flavors (Group 9);

(b) testing said sample cheese for the following non-volatile components:

compounds having the taste impression salty (Group 10);
compounds having the taste impression sour (Group 11);
compounds having astringent, bitter notes (Group 12);
compounds having the taste impression sweet (Group 13); and
compounds having a glutamate-like taste impression (umami)
(Group 14);

- (c) preparing a first artificial cheese flavoring component comprising volatile compounds of Groups 1-9 in proportions corresponding to the detected amounts, and
- (d) preparing a second artificial cheese flavoring component comprising non-volatile compounds of Groups 10-14 in proportions corresponding to the detected amounts.
- 54. (previously presented) A method as in Claim 53, wherein said testing involves determining odor active values (OAV) and disregarding any values of less than one.

U.S. Application No.: 09/871,059
AMENDMENT D

Attorney Docket: 3968.024

55. (previously presented) A method as in Claim 53, wherein said testing involves determining taste active values (TAV) and disregarding any values of less than one.